

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 125)

FOIL the expressions shown below:

1. $(8x + 7)(-2x + 3)$

$$\begin{aligned} & (8)(-2)x^2 + (8)(3)x + (7)(-2)x + (7)(3) \\ & (-16)x^2 + (24)x + (-14)x + (21) \\ & -16x^2 + 10x + 21 \end{aligned}$$

2. $(7x + 6)(-7x - 6)$

$$\begin{aligned} & (7)(-7)x^2 + (7)(-6)x + (6)(-7)x + (6)(-6) \\ & (-49)x^2 + (-42)x + (-42)x + (-36) \\ & -49x^2 - 84x - 36 \end{aligned}$$

3. $(3x - 3)(-5x + 6)$

$$\begin{aligned} & (3)(-5)x^2 + (3)(6)x + (-3)(-5)x + (-3)(6) \\ & (-15)x^2 + (18)x + (15)x + (-18) \\ & -15x^2 + 33x - 18 \end{aligned}$$

4. $(6x + 3)(8x + 2)$

$$\begin{aligned} & (6)(8)x^2 + (6)(2)x + (3)(8)x + (3)(2) \\ & (48)x^2 + (12)x + (24)x + (6) \\ & 48x^2 + 36x + 6 \end{aligned}$$

5. $(-7x - 2)(-3x + 6)$

$$\begin{aligned} & (-7)(-3)x^2 + (-7)(6)x + (-2)(-3)x + (-2)(6) \\ & (21)x^2 + (-42)x + (6)x + (-12) \\ & 21x^2 - 36x - 12 \end{aligned}$$

FOIL the expressions shown below:

6. $(6x - 8)(-4x - 4)$

$$\begin{aligned}(6)(-4)x^2 + (6)(-4)x + (-8)(-4)x + (-8)(-4) \\ (-24)x^2 + (-24)x + (32)x + (32) \\ -24x^2 + 8x + 32\end{aligned}$$

7. $(-6x + 5)(4x + 5)$

$$\begin{aligned}(-6)(4)x^2 + (-6)(5)x + (5)(4)x + (5)(5) \\ (-24)x^2 + (-30)x + (20)x + (25) \\ -24x^2 - 10x + 25\end{aligned}$$

8. $(3x - 9)(-3x - 5)$

$$\begin{aligned}(3)(-3)x^2 + (3)(-5)x + (-9)(-3)x + (-9)(-5) \\ (-9)x^2 + (-15)x + (27)x + (45) \\ -9x^2 + 12x + 45\end{aligned}$$

9. $(-7x + 6)(-2x - 4)$

$$\begin{aligned}(-7)(-2)x^2 + (-7)(-4)x + (6)(-2)x + (6)(-4) \\ (14)x^2 + (28)x + (-12)x + (-24) \\ 14x^2 + 16x - 24\end{aligned}$$

10. $(-7x - 7)(-9x - 4)$

$$\begin{aligned}(-7)(-9)x^2 + (-7)(-4)x + (-7)(-9)x + (-7)(-4) \\ (63)x^2 + (28)x + (63)x + (28) \\ 63x^2 + 91x + 28\end{aligned}$$